

JUN 24 2005

## 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

**Common/Usual Name:** Intravascular Diagnostic Catheter

**Product Trade Name:** Langston™ Dual Lumen Pressure Monitoring Catheter

**Classification Name:** Unclassified  
Product Code: DQO

**Manufacturer:** Vascular Solutions, Inc.  
6464 Sycamore Court  
Minneapolis, Minnesota 55369  
USA

**Establishment Registration:** 2134812

**Contact:** Sara L. Coon  
Senior Regulatory Affairs Associate  
(763) 656-4300 phone  
(763) 656-4200 fax

**Performance Standards:** No performance standards have been developed under section 514 for this device.

**Device Description:**

The Vascular Solutions Langston™ Dual Lumen Pressure Monitoring catheter is intended for use as a pressure measurement catheter and for delivery of contrast media during angiographic studies. The DLP catheter consists of the Merit Medical Softouch Diagnostic Intravascular Catheter (K943739) as the inner lumen and an extruded outer lumen designed by Vascular Solutions. The inner lumen and hub assembly are purchased from Merit Medical in a non-sterile state. The Merit Softouch catheter and outer lumen are joined together using an adapter junction placed near the proximal end of the Merit Softouch catheter. The adapter junction incorporates a side port fitted with a stopcock/tube assembly for fluid flow and pressure measurement within the outer tube. The distal end of the outer tube is perforated with side holes to allow pressure measurement simultaneously with the sideholes at the tip of the catheter. The dual lumen catheter is deployed through standard guide catheters and will accommodate standard 0.038" diameter guidewires.

**Intended Use:**

The Vascular Solutions Langston™ Dual Lumen Pressure Monitoring Catheter is indicated for delivery of contrast medium in angiographic studies and for simultaneous pressure measurement from two sites. This type of pressure measurement is useful in determining transvalvular, intravascular and intraventricular pressure gradients.

**Summary of Non-Clinical Testing:**

Testing conducted included assessments of the design verification of the Dual Lumen Pressure Monitoring Catheter along with biocompatibility assessments. The results of this battery of tests confirmed the suitability of the Dual Lumen Pressure Monitoring Catheter for its intended use.

**Summary of Clinical Testing:**

No clinical evaluations of this product have been conducted.

**Predicate Device**

The Dual Lumen Pressure Monitoring catheter is similar in intended use and function to the Langston Dual Lumen Pigtail Catheters, the Cordis Dual Lumen Pressure Monitoring Catheter, and the Merit Medical Softouch Diagnostic Intravascular Catheter.

**Conclusions:**

The Langston Dual Lumen Pressure Monitoring Catheter is substantially equivalent to the Langston Dual Lumen Pigtail Catheters, the Cordis Dual Lumen Pressure Monitoring Catheter and the Merit Medical Softouch Diagnostic Intravascular Catheter. The testing performed confirms that the Langston Dual Lumen Pressure Monitoring Catheter will perform as intended.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

JUN 24 2005

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Vascular Solutions, Inc.  
c/o Ms. Sara L. Coon  
Sr. Regulatory Affairs Associate  
6464 Sycamore Court  
Minneapolis, MN 55369

Re: K051395  
Langston™ Dual Lumen Pressure Monitoring Catheter  
Regulation Number: 21 CFR 870.1200  
Regulation Name: Diagnostic Intravascular Catheter  
Regulatory Class: Class II (two)  
Product Code: DQO  
Dated: May 26, 2005  
Received: May 27, 2005

Dear Ms. Coon:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

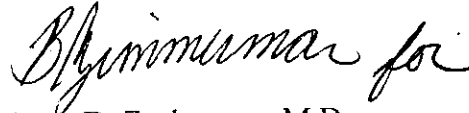
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "B. Zuckerman for".

Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

Indications for Use Statement

510(k) Number: K051395

Device Name: Langston™ Dual Lumen Pressure Monitoring Catheter

Indications for Use:

The Vascular Solutions Langston™ Dual Lumen Pressure Monitoring Catheter is indicated for delivery of contrast medium in angiographic studies and for simultaneous pressure measurement from two sites. This type of pressure measurement is useful in determining transvalvular, intravascular and intraventricular pressure gradients.

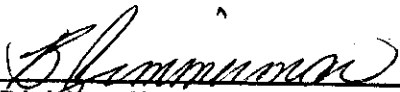
Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Cardiovascular Devices  
510(k) Number K051395

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